

Amendment under 37 CFR §1.111
Attorney Docket No.: 053362
Application No.: 10/561,538

REMARKS

Claims 1-20 are pending in the present application. Claims 8-13, 15, 18 and 19 are withdrawn from consideration. Claims 1-7, 14, 16 and 17 are herein amended. Claim 20 is newly added.

Claim Objections

Claims 2 and 3 were objected to as not further limiting the claim from which they depend. Claims 2 and 3 have been amended to further limit claim 1.

Withdrawal of the objection is requested.

Claim Rejections - 35 U.S.C. § 112

Claims 1 and 3-6 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Regarding claim 1, the Office Action states that the term “objective component” is not clearly defined in the specification. Claim 1 has been amended to change “objective component” to “--optically detectable compound--” as suggested by the Office Action.

Regarding claims 3 and 5, the Office Action states that no specific method steps are recited and that the elements in the Markush group are different in nature. Claims 3 and 5 have been amended to recite specific method steps. Regarding the Markush group, according to the MPEP,

it is sufficient if the members of the [Markush] group are disclosed in the specification to possess at least one property in common which is mainly responsible for their function in the claimed relationship, and it is clear from their very nature or from the prior art that all of them possess this property.

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MPEP § 2173.05(h). The members of the Markush group of claims 3 and 5 are related in that they are all means for making an atmosphere surrounding a reaction vessel and/or an atmosphere surrounding the reaction vessel in the photometry chamber electrically constant, and thus, the Markush group is in proper form. (Specification, Paragraphs 20-31.)

Regarding claims 4 and 6, the Office Action states that these claims are unclear. Claims 4 and 6 have been amended for clarification.

Withdrawal of the rejections under § 112 is requested.

Claim Rejections - 35 U.S.C. § 103

Claims 1-5, 7 and 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over **McCaffrey** (US 2001/0038450) in view of **Ryoji** (Engineering Materials, 1999); and claims 6 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over **McCaffrey** in view of **Ryoji** and further in view of **Rapp** (US 6,602,464).

Favorable reconsideration is requested.

(1) Applicants respectfully submit that claims 1 and 14 are non-obvious over the prior art because they provide unexpected results over the prior art.

The results in Table 4 demonstrate that even though grounding is set in the photometry chamber as taught in McCaffrey, the background value is not suppressed, but that when an anti-static sheet is used, the background value is suppressed.

The Office Action takes the position that the results in Table 4 do not provide a close comparison with what is taught in McCaffrey. The Office Action states that Table 4 compares the effect of grounding the instrument and the effect of lining anti-static tape inside the

measurement chamber, but that McCaffrey discloses lining the inside of the chamber with conducting material. (Office Action, page 2.)

However, the device in McCaffrey made of conductive material provides grounding. McCaffrey states “a sample compartment of known devices must be *made of a conductive material* or some other means must be provided *to drain static charge* from the sample consumable.” (Paragraph 15.) Thus, McCaffrey corresponds to the prior art example in the present specification in which aluminum foil is set at the undersurface, *i.e.*, in Example 3. As pointed out in Paragraph 93 of the present specification, the title of Example 3 is “Influence of Electrification of a Reagent Cartridge and Grounding Effect on the Measurement.” And as explained in Paragraph 94, the aluminum foil provides grounding. The results in the present specification demonstrate unexpected results over the prior art, including McCaffrey, and thus, the present invention is non-obvious over the prior art.

(2) Applicants respectfully submit that McCaffrey in view of Ryoji does not teach or suggest “making an atmosphere surrounding a reaction vessel and/or a reaction vessel in a photometry chamber electrically constant” as recited in claim 14.

McCaffrey discloses a method for detecting light produced by chemiluminescence and an ATP-chemiluminescence detection device. The device includes photodetecting transducers for detecting luminescence. The device is made of a conductive material or “some other means” is provided for draining static charge. (Paragraph 15.)

The Office Action acknowledged that McCaffrey does not disclose what the “some other means” are. (Office Action, page 4.) The Office Action cited Ryoji for teaching static electricity

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removal. (Office Action, page 4.) Ryoji discloses, in the title, static electricity removal and static electricity elimination materials, and persistent static elimination ABS resins “Novally E series.”

However, even if static charge can be drained from the chamber, for instance, by ground, an atmosphere in the chamber is not necessarily electrically constant, and thus, McCaffrey in view of Ryoji does not teach or suggest all of the elements as recited in claim 14.

(3) Applicants respectfully submit that it would not have been obvious to combine the teachings of McCaffrey and Ryoji.

A full copy of Ryoji and partial English translation of the reference are attached. Ryoji discloses persistent static elimination ABS resins “Novalloy E series.” Ryoji discloses, for example, the use of “Novalloy E series” for paper feeding mechanism, air cleaner, etc. It would not have been obvious to one of ordinary skill in the art to combine the teachings of static elimination for paper feeding mechanisms or air cleaners with the teachings of McCaffrey which discloses a method for detecting light produced by chemiluminescence.

(4) Applicants respectfully submit that claims 6 and 17 would not have been obvious over McCaffrey in view of Ryoji and further in view of Rapp because Rapp is in a non-analogous art.

The Office Action acknowledged that McCaffrey in view of Ryoji does not disclose “shutting an opening part of the vessel holding the solution with a sheet, or a method for covering the surface of the solution in the reaction vessel with a substrate insoluble to the

solution. (Office Action, page 5.) The Office Action cited Rapp for teaching the use of an oil layer to seal a surface of an aqueous solution.

Rapp discloses treating agricultural animal waste to minimize odorous emissions. (Col. 2, lines 31-39.) The Treatment includes the use of oil and activated carbon applied to the surface of liquid animal waste creating a seal.

The present invention is in the art of spectral measurement and improvement of the accuracy of the measurement in a spectrophotometer. By contrast, Rapp discloses methods of minimizing odorous emissions from agricultural animal waste. The art of treating agricultural waste is not reasonably pertinent to the art of the present invention.

(5) Applicants respectfully submit that claims 6 and 17 are non-obvious because it would not have been obvious to one of ordinary skill in the art to combine the teachings of sealing odorous emissions in Rapp with the methods of draining static charge in McCaffrey.

The Office Action stated that McCaffrey discloses the use of “some other means” for draining electric charge and takes the position that it would have been obvious to use the sealing method taught in Rapp. (Office Action, page 5.) However, Rapp merely discloses sealing odorous emissions. Rapp does not teach that the oil layer would block contact to the atmosphere and prevent electric charge from transferring to the solution. Thus, it would not have been obvious to one of ordinary skill in the art to combine the methods of Rapp with the methods of McCaffrey.

Regarding the limitation of “shutting an opening part of the reaction vessel,” the Office Action takes the position that this feature is well known in the art. (Office Action, page 5.) It

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may be well known to shut an opening part of the reaction vessel to avoid contamination of dust, when the reaction vessel having some material is stored. However, Applicants respectfully submit that it is not well known in the art to shut an open part of the reaction vessel when the luminescence is measured, and the Office Action has not provided any evidence to demonstrate that this feature is well known.

For at least the foregoing reasons, claims 1-7, 14, 16, 17 and 20 are patentable over the cited references. Accordingly, withdrawal of the rejection of claims 1-7, 14, 16, 17 and 20 is hereby solicited.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

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If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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AGM/adp

Attachment: Full copy of Ryoji
Partial translation of Ryoji